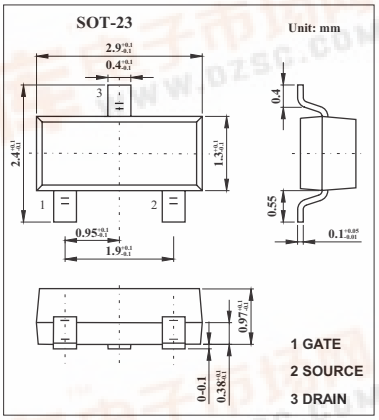
SMD Type MOSFET

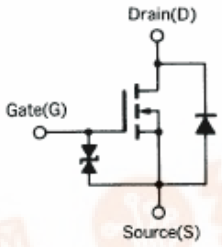
MOS Field Effect Transistor

2SK1133



Features

- Directly driven by Ics having a 5V power source.
- Not necessary to consider driving current because of its high input impedance.
- Possible to reduce the number of parts by omitting the biasresistor.



Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Drain to source voltage	V_{DSS}	50	V
Gate to source voltage	V_{GSS}	±7.0	V
Drain current (DC)	I_D	±100	m A
Drain current(pulse) *	I_D	±200	mA
Power dissipation	P_D	200	m W
Channel temperature	T_{ch}	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

* PW≤ 10ms, duty cycle ≤ 50%

Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Drain cut-off current	I_{DSS}	V_{DS}=50V,V_{GS}=0			-10	μA
Gate leakage current	I_{GSS}	V_{GS}=±7V,V_{DS}=0			±10	μA
Gate to source cutoff voltage	$V_{GS(off)}$	V_{DS}=5.0V,I_D=1μA	1.0	1.7	2.0	V
Forward transfer admittance	$\|Y_{fs}\|$	V_{DS}=5.0V,I_D=20mA	20	40		ms
Drain to source on-state resistance	$R_{DS(on)}$	V_{GS}=4V,I_D=20mA		16	50	Ω
Input capacitance	C_{iss}	V_{DS}=5.0V,V_{GS}=0,f=1MHZ		7		pF
Output capacitance	C_{oss}			6		pF
Reverse transfer capacitance	C_{rss}			2		pF
Turn-on delay time	$t_{d(on)}$	$V_{GS(on)}$=0,V_{DD}=5V,f=1MHz		6		ns
Rise time	t_r			25		ns
Turn-off delay time	$t_{d(off)}$			36		ns
Fall time	t_f			35		ns

Marking

Marking	G11